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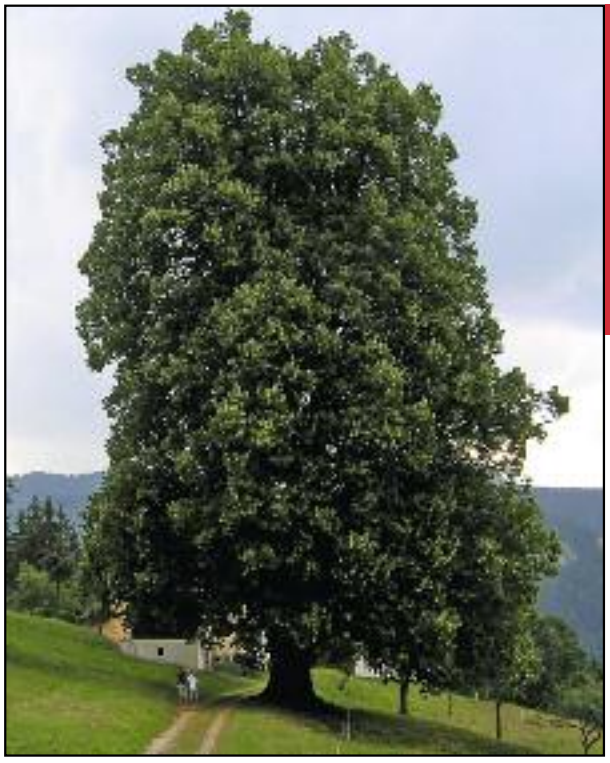
PROTECTING TREES THROUGH AN INVENTORY AND TYPOLOGY: HERITAGE TREES IN THE KARAVANKE MOUNTAINS, SLOVENIA

VLOGA INVENTARIZACIJE IN TIPIZACIJE PRI UČINKOVITEM VAROVANJU DREVESNE DEDIŠČINE V POKRAJINI: DREVESNA DEDIŠČINA V KARAVANKAH

Mateja Šmid Hribar, Anka Lisec



MATEJA ŠMID HRIBAR

In the Karavanke Mountains, a linden tree was usually planted a few steps from the farmhouse, such as this magnificent linden tree at the Močnik farm in Spodnje Jezersko.
V Karavankah so lipo pogosto zasadili nekaj korakov od hiše, podobno kot veličastno lipo, ki raste pri Močnikovi domačiji na Spodnjem Jezerskem.

Protecting trees through an inventory and typology: Heritage trees in the Karavanke Mountains, Slovenia

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ABSTRACT: Both research and policy require a transparent approach to monitoring and managing natural and cultural heritage because landscape quality has become a key concept in landscape planning. This paper introduces an advanced approach to natural and cultural heritage inventory for the study of heritage trees. Because trees play different roles in society, different regulations apply to their preservation, which can lead to inconsistencies in records for heritages trees. The inventory of heritage trees and their types in the study area identified within the Karavanke Natura 2000 project, which is presented in this paper, is based on existing lists of heritage trees, fieldwork, and interviews. A new database of heritage trees has been established in which the advantage of geographical information systems unifying various data sources is emphasized.

KEY WORDS: geography, heritage, values, protection policy, inventory, tree, geographical information systems, geographic information systems, Karavanke, Slovenia

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Contents

1 Introduction

The extent of various forms of environmental degradation and their consequences has proven the need to follow the guidelines of long-term sustainable development in all fields of human activity which should be based on understanding of the social and natural elements of the landscape (Komac 2009). Consequently, the importance of a protection policy for the natural and cultural environment supported by an institutional framework has been increasing throughout the world. The protection of the human environment must be transparent and efficient for all actors involved; general declarations by them at the national level and higher might be insufficient. The gap between centrally defined policies and local decisions, as well as the problem of a lack of qualitative data, have been already discussed for land management (Pinto-Correia et al. 2006; Lisec and Drobne 2009); the same applies to other sources or entities in our environment that must be preserved and suitably managed. In order to provide a platform for suitable decisions for sustainable development, a qualitative, unified, and holistic approach to inventorying special entities and sources should be developed. Komac and Zorn (2010) emphasized that only a few papers have been published dealing with this topic. One of them is the example of geomorphosite assessment (Erhartič 2010).

The role of trees in society has taken many forms in human history (Whatmore and Bouchure 1993). Heritage trees as trees with particular natural or cultural characteristics can play an important role in the cultural landscape and in society, and therefore demand an effective protection policy (Šmid Hribar 2009, 2011). As stated by Cloke and Pawson (2008), trees can mark the histories of the lives lived around them, but they are also marked by the changing cultural settings in which these histories are performed. The material nature of trees affects the meaning of a place and how it is experienced and represented. Trees are the result of lengthy processes and dwelling practices over time that involve the intimate togetherness of living beings and objects that create landscapes and bind together nature and culture over time (Cloke and Jones 2001, Jones and Cloke 2002).

This paper explores an inventory of heritage trees as a basis for their effective protection and management. The main goal is to highlight the importance of a qualitative database of heritage trees (Watkins 1998; Cloke and Pawson 2008). Based on existing heritage tree lists from various institutions, fieldwork, and interviews, a new unified database of heritage trees has been established for the study area.

2 Background

The relationship between humans and trees has changed throughout history and within different cultures. Clare and Bunce (2006) showed that the tree population of landscapes relates to past land use and reflects interactions between humans and nature through time. Heritage trees can stand out from the surroundings for their material attributes (form, size, species, age, etc.) or for their non-material values (e.g., ethnological, memorial, symbolic, or aesthetic meaning; Šmid Hribar 2008, 2009, 2011). As Jones and Cloke (2001) pointed out, the exterior of trees forms a material formation into which cultural constructions are placed. Therefore, tree preservation should not focus only on material characteristics, but also on trees that have special cultural meanings, no matter how young or slender they are.

In Slovenia, the first tree-protection policy dates back to the nineteenth century and mainly began in the framework of forestry service (Anko 1988). The protection of heritage trees was later developed by the public Institute for the Protection of Cultural and Natural Heritage. Since the division of this institute into two parts – the Institute for the Protection of Cultural Heritage in Slovenia and the Institute for Nature Conservation – the latter has cared for heritage trees.

Today tree protection is mainly based on the natural and cultural protection policy and on forestry legislation. The Nature Conservation Act (Zakon o ohranjanju narave 2004) introduced the term »valuable natural features« to describe natural heritage. The system contains 12 different categories, one of them being the »valuable tree« feature, which is defined in the Decree on the Categories of Valuable Natural Features (Uredba … 2002) as:

A tree or a group of trees that are of exceptional dimensions, form, and longevity and have an ecosystem, research, or testimonial importance, including the location of such trees. In nature this can appear in particular as an individual tree outside the forest or as a group of trees or an individual tree in the forest that stands out from the surroundings for its exceptional attributes.

In addition, trees are protected by forestry and cultural legislation. Trees outside forests might be the subject of cultural heritage protection. Such trees are not explicitly mentioned in the Cultural Heritage Protection Act (Zakon o varstvu … 2008), but can be found within the cultural landscape category or within the garden-architectural category of heritage. The protection of forest trees is defined by the Act on Forests (Zakon o spremembah … 2007).

In Slovenia, there is no holistic and systematic legislation that covers all heritage trees transparently. The only officially recognized heritage trees in Slovenia are those with valuable tree features; however, not all of them are protected. Legal status is assured only for those trees that have been the object of special decrees.

3 Materials and methods

An inventory of heritage trees was conducted in the study area in the central Karavanke Mountains, identified by the project Karavanke Natura 2000 (the Phare project Slovenia/Austria – Internet 1; Figure 1). In the lowlands, clustered villages and settlements can be found, where a linden tree usually grows in the center of the village to create a central village area. Specific characteristics of mountain settlements are isolated farms where one or more linden trees were planted in the most beautiful scenic area of the farm.

For the purpose of the holistic inventory of heritage trees, for which a GIS database with tangible and intangible characteristics of trees was created, the following methods were used:

- Review of existing heritage tree lists in the study area;
- Fieldwork where tangible and intangible data on heritage trees were collected; and
- Data analyses and presentation of the data in a GIS environment.

The main aim of the fieldwork was to check the existence and condition of trees as well as conduct interviews. Semi-structured interviews were used as a tool to analyze the role of each particular tree within the local society. For this purpose, the locals and the owners of heritage trees were interviewed. The interview included the following questions:

- Who planted the tree?
- When and why was the tree planted?
- How do the owners and locals take care of the tree?
- What is the relationship between the tree and its owner or the locals?
- How will the tree be treated when it is sick and old?
- Is there a story/legend related to the tree; what is it?

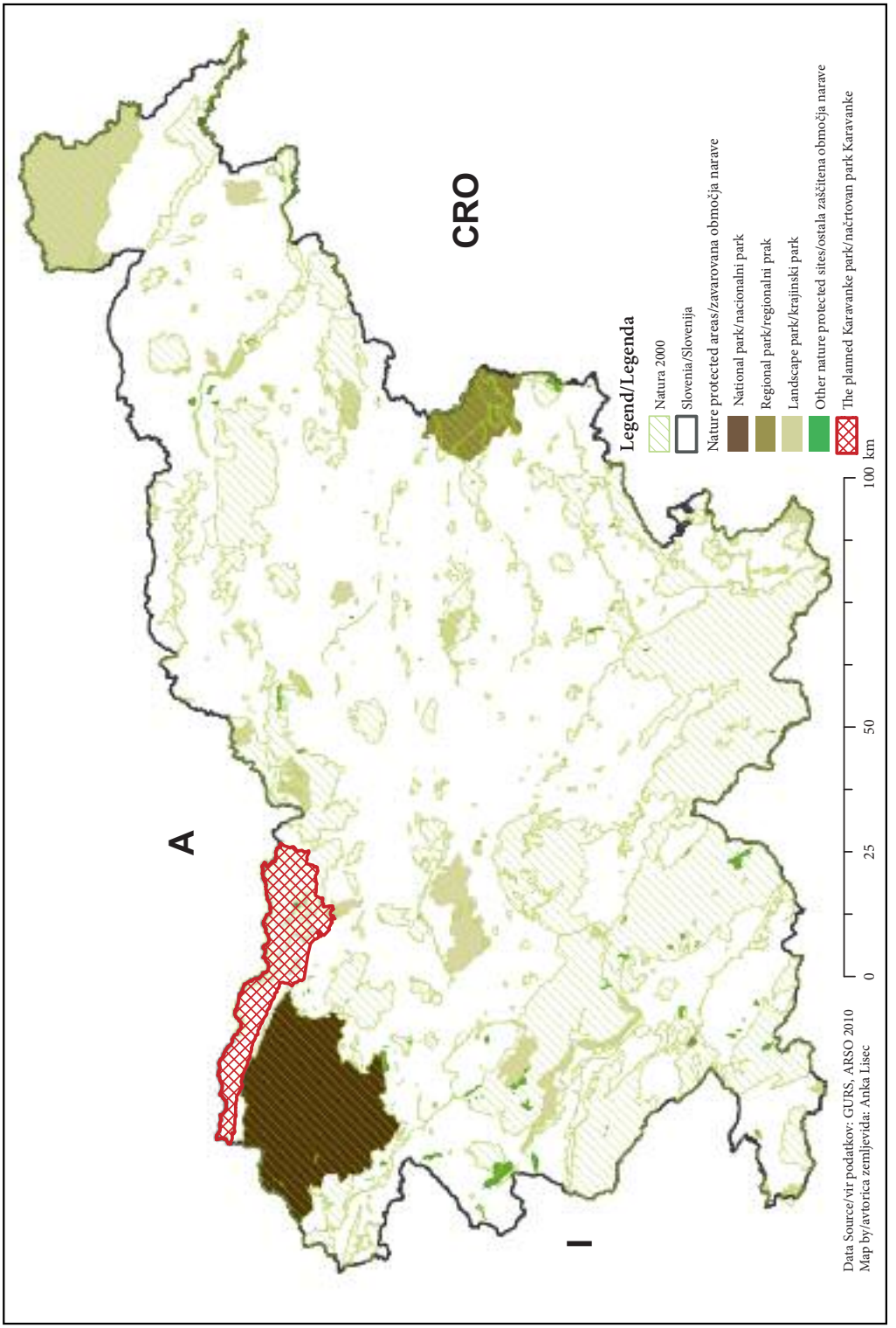
4 Inventory of heritage trees in the study area

Different lists of heritage trees exist for the study area. As already mentioned, the official status of valuable tree features was only given to trees from the Register of Valuable Natural Features. However, different institutions consider it important to preserve and register remarkable trees as well. Consequently, several unofficial tree lists have appeared spontaneously within different institutions. The compatibility between the heritage tree lists used in the research is presented in Figure 2.

The Register of Valuable Natural Features for the study area is maintained by the Kranj Regional Unit of the Slovenian Institute for Nature Conservation. Data on trees acquired from the Kranj Regional Unit (in 2006) consisted of the name of the valuable tree feature, identification numbers, information about its importance (local or national), a short designation, and location (Pravilnik o določitvi … 2004). Although in most cases the exact number of trees for the record was given, a few cases mentioned only »trees« or »a group of trees.« Thirty-four records of valuable tree features were recorded in the register. In addition, five valuable tree features were included in the new database with a grove outside the borders of the planned park, but still in the geographical area of the Municipality of Jezersko. Among the 39 records from the register that were included in the new database, five records referred to more than one tree.

The Kranj Regional Unit of the Institute for the Protection of Cultural Heritage in Slovenia (IPCH) does not maintain a special list of trees. However, as part of its work, trees with special cultural significance

Figure 1: Nature protected areas, Natura 2000 in Slovenia, and the study area identified within the Karavanke Natura 2000 project. ►


A
CRO
I
Legend/Legenda
Natura 2000
Slovenia/Slovenija
Nature protected areas/zavarovana območja narave
National park/nacionalni park
Regional park/regionalni prak
Landscape park/krajinski park
Other nature protected sites/ostala zaščitena območja narave
The planned Karavanke park/načrtovan park Karavanke
0
25
50
100 km
Data Source/vir podatkov: GURS, ARSO 2010
Map by/avtorica zemljevida: Anka Lisec

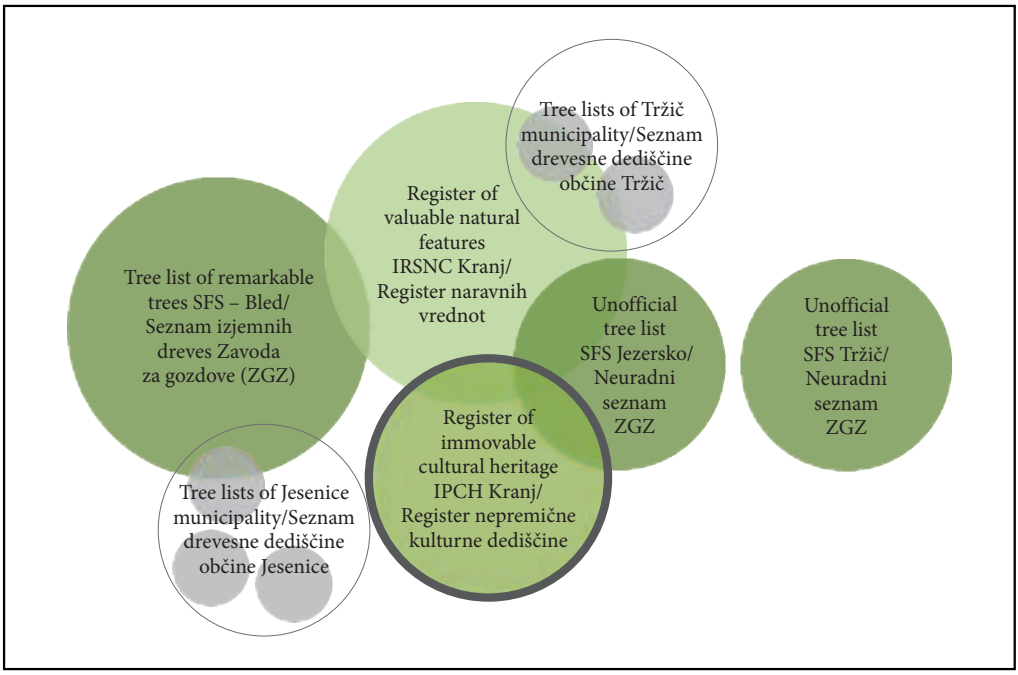


Figure 2: Various heritage tree lists exist in the area studied.

(in the village center, promenade trees, etc.) are considered. We identified five trees (four records) and strings of ash trees in the Register of Immovable Cultural Heritage maintained by the IPCH, but it was not possible to obtain any other data on these trees (Internet 2).

The Slovenian Forest Service maintains its own lists of remarkable trees (the SFS tree list). For the purpose of our research, one regional unit (Bled) and two local units (Tržič and Jezersko) of the Slovenian Forest Service provided data for 35 remarkable trees that were included in the study (Seznam evidentiranih … 2006, Neuradni seznam … 2006).

The municipalities of Jesenice and Tržič maintain their own unofficial tree lists, but because of missing data (trees are only listed, but not properly recorded and nobody looks after them) these databases were considered a secondary source.

5 Results and discussion

In order to demonstrate a holistic approach to the heritage tree inventory, a new database of heritage trees was created for the study area and its buffer zone, which includes valuable tree features and heritage trees from the existing tree lists. An additional 18 trees and three strings of trees were identified during the fieldwork.

5.1 Types of heritage trees

At the very beginning, an interesting finding related to the type of heritage trees. During the fieldwork it was found that in some cases there is more than one tree (of the same or different species) growing within a single record in the existing databases, which was not evident from the existing heritage tree lists. In certain other examples, trees grow relatively close but are treated as individual trees. Here it must be taken into consideration that groups of trees may be of different types with different roles in the landscape: trees in strings have a different value and visual meaning than trees in clusters. Furthermore, the protection of an individual tree is not the same as for a group of trees. For a more systematic approach, different categories

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Figure 3: An individual tree, a group of trees, the cluster of trees named Čeringl's Crown (Čeringlska krona), and pollarded ash trees marking land borders in Jezersko.

of heritage trees were first introduced. In line with the forest linkage used in forestry in Slovenia and findings from fieldwork, the following categories of heritage trees were defined (Figure 3):

- **An individual tree** is a tree growing by itself (see Table 1)
  - In the forest
  - Outside the forest
    - A house tree
    - A village tree
    - A city tree (usually growing in the courtyard of an old inn)
- **A group of trees** is defined as trees of the same or different species growing close to each other and recognized as a unit in the landscape. If an individual part of the group is changed (but not removed), it is still recognized as a group. A cluster of trees is defined as a few trees without area characteristics but with a notable shape, and a string of trees as trees of the same or different species growing in a line or in a corridor, often as a consequence of a specific land-management approach.
  - In the forest
    - A cluster of trees
  - Outside the forest
    - A group of trees
    - A cluster of trees
    - A string of trees

5.2 Heritage trees in the study area by introduced types

A detailed analysis of various tree lists showed that some trees are included in more than one tree list (Figure 2). Based on data from the Register of Valuable Natural Features, the Register of Immovable Cultural Heritage, and other tree lists, 90 records of heritage trees were identified in the study area (Table 1). The fieldwork showed that seven trees (within six records) from the Register of Valuable Natural Features no longer existed and therefore they were excluded from the new database of heritage trees. Eighty individual trees (76 individual records), two groups of trees, one cluster of trees, and five strings of trees were registered in the study area.

Among **individual trees**, only 32 trees (40%) are included in the Register of Valuable Natural Features. Most of the individual trees (72.5%) are deciduous trees, among which linden trees (*Tilia platyphyllos* and *Tilia cordata*) predominate. The majority of the conifers are spruce (*Picea abies*). The following trees are also present in the area: fir (Abies alba), chestnut (*Castanea sativa*), beech (*Fagus sylvatica*), ash (*Fraxinus excelsior*), elm (*Ulmus* sp.), yew (*Taxus baccata*), larch (*Larix decidua*), oak (*Quercus robur*), pear (*Pyrus* sp.), and elder (*Sambucus nigra*).

Both **groups of trees** consist of linden trees and are found in the Municipality of Jezersko, where people used to plant lindens as a »house tree« at farms. Linden trees in Jezersko were sometimes also planted for protection against the wind.

The only **cluster of trees** is located in a forest where there used to be pasture in the past. It consists of seven beech trees named Čeringl's Crown because the trees grow in a circle. Each beech tree is 40 cm or more in diameter. It is very likely that this cluster of trees grew out of a stump (Meglič 2011). The owner estimates these beech trees to be between 150 and 200 years old.

Finally, there are also five **strings of trees**. Two strings of trees are placed along an old path that was used for taking cattle to pasture. The trees functioned as a fence so the cattle were not able to roam in the fields, where they could cause damage. Based on interviews with the locals, such strings of trees are rapidly disappearing nowadays. The third string consists of pollarded ash trees growing in strings in Jezersko, creating a characteristic cultural landscape marker as a boundary marker. The ashes were planted by both owners along the boundary between two plots of land in Jezersko. The leafy branches of pollarded ash trees were used as a winter fodder for sheep. Another benefit of this long string of trees was the barrier it created against the strong wind. The fourth string is part of the remnants of an oak avenue that once grew along a country road. Now only five oaks are remain in this avenue and are in poor condition. The last string of trees was planted in memory of Jugoslav president Tito at the time of his death. The eighty-eight linden trees represent the age at which he died; however, after 26 years only 39 trees are still alive.

The spatial pattern of heritage trees in the study area is presented in the thematic map of heritage trees (Figure 4), which offers additional information: various attributes are presented through the cartographic variables (associative symbols for various types of heritage trees, different colors for different data sources, etc.).

6 Conclusion

The main aim of this paper was to show the complexity of heritage trees, which in most cases is intimately connected to the human presence and land use in a specific landscape. For transparent and effective heritage tree preservation, this must include the institutional (legal) framework, along with trees important for material and nonmaterial attributes.

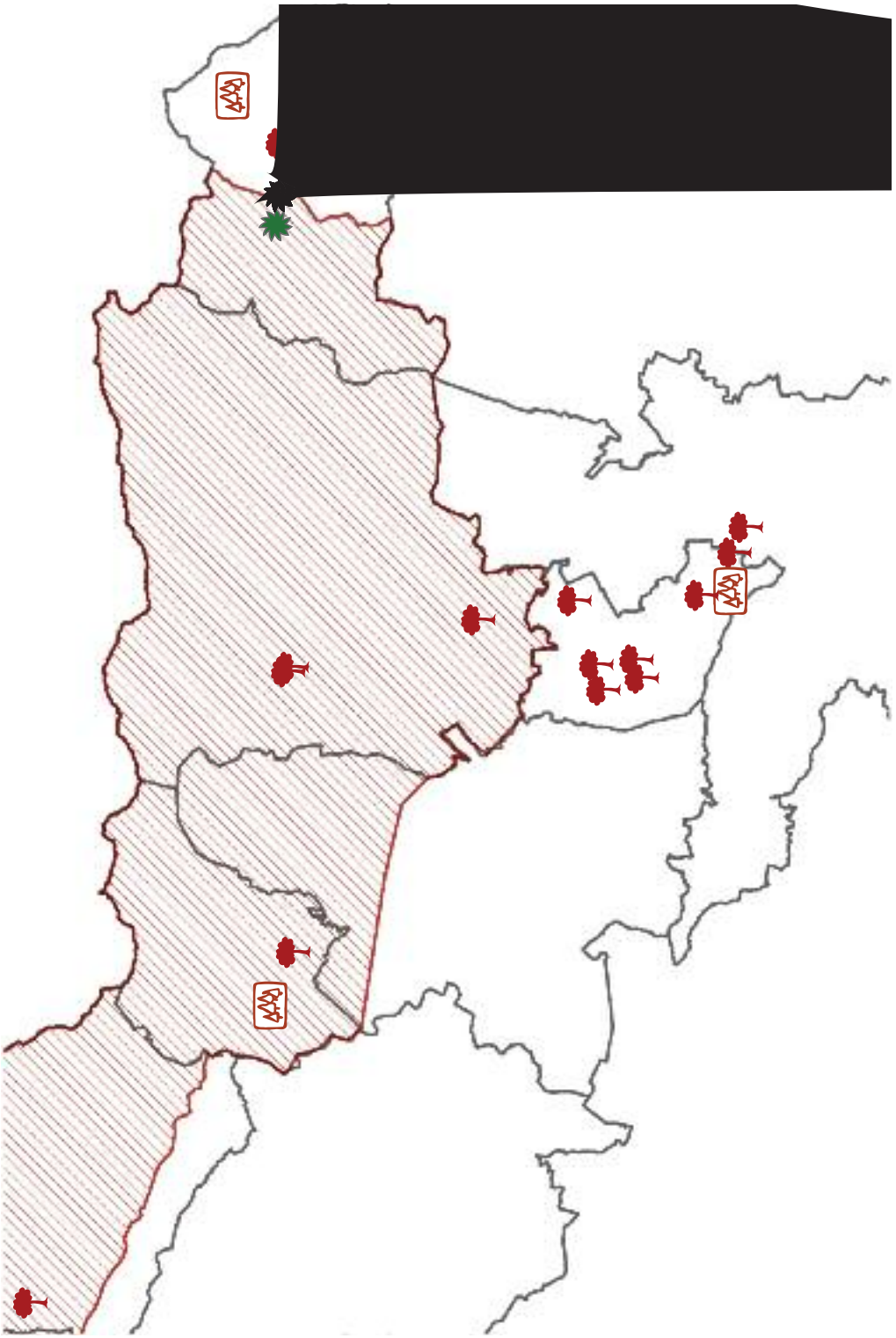
In Slovenia, heritage trees are currently scattered among different lists. The scattered data present a serious obstacle to effective heritage tree management and protection. Another Important challenges associated with recording of heritage tree are based on dynamic nature of trees. Because trees are living beings that also die, databases are also subject to changes and will therefore never be final.

Based on experience in the study area, duplicated, incomplete, old, or even incorrect data weaken the credibility of the existing register, and the risk of loss of heritage trees from unofficial lists may be significant when

Figure 4: Spatial presentation of (new) unified database heritage trees, including data source of heritage trees already inventoried and new trees added during fieldwork. ► p. 178

Table 1: Various types of heritage trees and tree species or genus in the planned Karavanke Natura 2000 park.

	Individual tree (76 records)	Group of trees (2 records)		Cluster of trees (1 records)	String of trees (5 records)				
	80 individual trees	Linden trees at an abandoned farm in Robci	Linden trees at the rectory in Jezersko	Čeringl's Crown	Double string at Zabreznica	Šenk's double string in Jezersko	Ash boundary marker	Oak avenue	Memorial lindens
Linden	35	5	10						39
Spruce	10								
Fir	7								
Chestnut	6								
Beech	5			7					
Ash	5					unknown			
Elm	3								
Yew	3								
Larch	2								
Oak	1							5	
Pear	1								
Elder	1								
Mixed					unknown		unknown		



ignoring unofficial data on heritage trees. The disadvantages of the current heritage tree inventory in the case studied lie in problems with inconsistent data and institutional disconnects.

The systematic registration of trees is of considerable importance to protect heritage trees. For effective protection of heritage trees and to support suitable decisions, it is necessary to have insight into a unified and updated database of protected trees, in which appropriate types are taken into account and available to various institutions directly or indirectly involved in the protection of heritage trees. Different types of heritage trees have different roles in the landscape, and the protection policy is also different. The database presented here should also be supplemented with skills and responsibilities required of those involved. In addition, the presentation of heritage trees in a thematic map significantly contributes to transparent evaluation, management, and protection of these trees as well as to raising public awareness. Only a well-informed public can play an active role in the process of sustainable development and adopt a mature, responsible attitude towards the living environment (Fridl et al 2009, Urbanc 2011).

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Vloga inventarizacije in tipizacije pri učinkovitem varovanju drevesne dediščine v pokrajini: drevesna dediščina v Karavankah

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IZVLEČEK: Tako znanost kot politika potrebujeta transparenten pristop pri spremljanju in upravljanju naravne in kulturne dediščine, saj je kakovost pokrajine postala ključen pojem pri njenem načrtovanju. V prispevku je na študijskem primeru drevesne dediščine predstavljen napreden pristop inventarizacije naravne in kulturne dediščine. Ker imajo drevesa v družbi različne vloge, je njihovo varovanje opredeljeno z različnimi predpisi, kar lahko vodi do neskladnosti pri vodenju evidenc o drevesni dediščini. Predstavljena inventarizacija drevesne dediščine in njena tipizacija, ki smo jo našli na raziskovanem območju, kot ga opredeljujejo meje projekta Karavanke Natura 2000, temelji na obstoječih seznamih drevesne dediščine, terenskem delu in intervjujih. Pripravili smo novo bazo drevesne dediščine, v kateri so izpostavljene prednosti geografskih informacijskih sistemov pri združevanju različnih podatkovnih virov.

KLJUČNE BESEDE: geografija, dediščina, vrednote, politika varovanja, drevo, geografski informacijski sistem, Karavanke, Slovenija

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Vsebina

1 Uvod

Razsežnost različnih oblik degradacije okolja in njihovih posledic je pokazala, da je treba na vseh področjih človekovega delovanja upoštevati smernice dolgoročnega trajnostnega razvoja, ki pa naj bi temeljile na razumevanju družbenih in naravnih sestavin pokrajine (Komac 2009), Posledično se je povečal tudi pomen varovanja naravnega in kulturnega okolja, kar se širom po svetu kaže tudi v vse večji institucionalni podpori. Varovanje človekovega okolja mora biti pregledno in učinkovito za vse deležnike; splošne deklaracije same po sebi na državnih in višjih ravneh bi lahko bile nezadostne. Razkorak med centralno vodeno politiko in odločitvami na lokalni ravni ter problemi pomanjkanja kakovostnih podatkov so bili že večkrat tema razprav predvsem na področju upravljanja zemljišč (Pinto-Correia et al 2006; Lisec in Drobne 2009), podobno velja za druge entitete in vire našega okolja, ki bi jih bilo treba varovati in z njimi smotrno upravljati. Z namenom pripraviti osnovo, ki bi pripomogla k primernim odločitvam v luči trajnostnega razvoja, je treba razviti kakovosten, poenoten in celovit pristop k inventarizaciji takih posebnih entitet oziroma virov. Zorn in Komac (2010) sta poudarila, da je bilo do zdaj s tega področja objavljeno le malo člankov. Eden med njimi je primer vrednotenja geomorfološke dediščine (Erhartič 2010).

Vloga dreves v družbi se je v človekovi zgodovini zelo spreminjala (Whatmore in Bouchure 1993). Drevesna dediščina kot drevesa s posebnimi naravnimi ali kulturnimi lastnostmi imajo lahko pomembno vlogo v kulturni pokrajini in v družbi, zato je potrebna učinkovita politika varovanja le teh (Šmid Hribar 2009, 2011). Kot sta trdila že Cloke in Pawson (2008), lahko drevesa pričujejo o življenju, ki se je dogajalo na nekem območju v preteklosti, lahko pa so zaradi spreminjajočega se kulturnega okolja v preteklosti zaznamovana tudi sama drevesa. Materialnost dreves vpliva na pomembnost kraja in na to, kako ga doživljamo in si ga predstavljamo. Drevesa so rezultat daljših procesov in praks prebivanja – gre za intimno povezanost bitij in stvari, ki ustvarjajo pokrajino in povezujejo naravo ter kulturo skozi čas.

V prispevku je inventarizacija drevesne dediščine predstavljena kot osnova za njihovo učinkovito varovanje in upravljanje. Glavni cilj je poudariti pomen kakovostnih podatkovnih zbirk o drevesni dediščini (Watkins 1998; Cloke in Pawson 2008). Na osnovi obstoječih seznamom drevesne dediščine različnih institucij, terenskega dela in intervjujev je bila za študijsko območje vzpostavljena nova poenotena podatkovna zbirka drevesne dediščine.

2 Ozadje

Odnos med človekom in drevesi se je skozi zgodovino in v različnih kulturah spreminjal. Clare in Bunce (2006) sta pokazala, da je populacija dreves v pokrajini odvisna od pretekle rabe tal in odseva odnos človeka do narave skozi čas. Drevo lahko v okolici izstopa zaradi materialnih lastnosti (oblika, velikost, vrsta, starost in podobno), ali pa zaradi nematerialnih vrednosti (etnološke, spominske, simbolne ali estetske vrednosti) (Šmid Hribar 2008, 2009, 2011). Kot sta poudarila James in Cloke (2001) zunanjost drevesa tvori materialno obliko, v kateri se nalagajo družbene vsebine. Zato se varovanje dreves ne bi smelo osredotočati zgolj na materialne lastnosti, temveč tudi na drevesa, ki imajo poseben kulturni pomen, in to ne glede na to, koliko so stara ali debela.

Prvi zametki varovanja dreves v Sloveniji segajo v 19. stoletje in izhajajo predvsem iz gozdarske stroke (Anko 1988). Pozneje se je varovanje drevesne dediščine razvijalo v okviru Zavoda za varovanje kulturne in naravne dediščine. Po razdelitvi zavoda na dve ločeni enoti – na Zavod Republike Slovenije za varstvo kulturne dediščine in Zavod Republike Slovenije za varstvo narave, je skrb za drevesno dediščino prevzela slednja.

Danes varstvo drevesne dediščine temelji na naravovarstveni in kulturnovarstveni politiki ter gozdarski zakonodaji. Zakon o ohranjanju narave (2004) je za »naravno dediščino« uvedel nov izraz »naravne vrednote«. Sistem varstva narave obsega 12 zvrsti naravnih vrednot, med katerimi je drevesna naravna vrednota v Uredbi o zvrsteh naravnih vrednot (2002, 3. člen) opredeljena kot:

»… drevo ali skupina dreves, ki so izjemnih dimenzij, habitusa, starosti, ekosistemsko, znanstveno-raziskovalno ali pričevalno pomembna ter vključuje tudi rastišče takšnih dreves in, ki se pojavlja v naravi zlasti kot posamezno drevo zunaj gozdnega prostora ter skupina dreves ali posamezno drevo v gozdu, ki zaradi izjemnih lastnosti izstopajo od dreves v okolici.«

Drevesa dodatno varuje zakonodaja s področja gozdarstva in kulture. Drevesa zunaj gozda so lahko zavarovana v okviru kulturne dediščine. Zakon o varstvu kulturne dediščine (2008) pojma drevesne dediščine posebej ne omenja, vendar pa lahko nekaj primerov takih dreves najdemo v sklopu kulturne krajine in vrtno-arhitekturne dediščine. Varovanje dreves v gozdu je opredeljeno v Zakonu o spremembah in dopolnitvah Zakona o gozdovih (ZG-B) (2007).

Trenutno v Sloveniji ni celostne in sistematične zakonodaje, ki bi transparentno in celostno pokrivala celotno drevesno dediščino. Edina uradno priznana drevesna dediščina so drevesne naravne vrednote, med katerimi pa niso vsa drevesa tudi zavarovana. Pravni status imajo namreč le tista drevesa, ki so zavarovana s posebnimi odloki in odločbami.

3 Materiali in metode

Inventarizacijo drevesne dediščine smo izvedli na območju v osrednjih Karavankah, kot je zamejeno v projektu Karavanke Natura 2000 (program PHARE Slovenija/Avstrija – internet 1) (Slika 1). V nižinskem delu prevladujejo gručaste vasi in naselja, sredi katerih navadno raste lipa, ki tvori osrednji vaški prostor. Za visokogorje pa so značilne samotne kmetije, kjer so na najlepšem razglednem mestu domačije zasadili eno ali več lip.

Za potrebe celostne inventarizacije drevesne dediščine, v okviru katere smo vzpostavili podatkovno bazo v okolju GIS in v kateri so bile upoštevane materialne in nematerialne lastnosti dreves, smo uporabili naslednje metode:

- pregled obstoječih seznamov drevesne dediščine na raziskovanem območju,
- terensko delo, v okviru katerega smo zbirali materialne in nematerialne podatke o drevesni dediščini in
- analiza podatkov in njihova predstavitev v okolju GIS.

Slika 1: Zavarovana območja narave, Natura 2000 v Sloveniji in raziskovano območje kot opredeljeno v projektu Karavanke Natura 2000.
Glej angleški del prispevka.

Glavni cilj terenskega dela je bilo poleg izvedbe intervjujev ugotoviti, ali drevesa še rastejo in v kakšnem stanju so. S pomočjo polstrukturiranih intervjujih smo preučevali vlogo posameznih dreves v lokalni skupnosti. Osredotočali smo se na naslednja vprašanja:

- Kdo je zasadil drevo?
- Kdaj in zakaj je bilo drevo zasajeno?
- Kako lastniki in domačini skrbijo za drevo?
- Kakšen odnos imajo lastnik in domačini do drevesa?
- Kaj bodo storili z drevesom, ko bo bolno, staro?
- Je z drevesom povezana kakšna zgodba ali legenda?

4 Inventarizacija drevesne dediščine na raziskovanem območju

Na raziskovanem območju obstaja več seznamov drevesne dediščine. Kot že omenjeno, imajo uradni status drevesne vrednote le drevesa, vključena v Register naravnih vrednot. Vendar pa se zdi varovanje in inventarizacija izjemnih dreves pomembna različnim institucijam. Posledično se je znotraj različnih institucij sponatno pojavilo več neuradnih seznamov. (Ne)ujemanje seznamov drevesne dediščine na raziskovanem območju prikazuje Slika 2.

Slika 2: Na raziskovanem območju obstaja več seznamov drevesne dediščine.
Glej angleški del prispevka.

Register naravnih vrednot na raziskovanem območju vodi kranjska območna enota Zavoda za varstvo narave. Podatki dreves pridobljeni z omenjenega zavoda so vsebovali ime drevesne vrednote, identifikacijsko številko, informacijo o pomenu (lokalen ali državen), kratko oznako in lokacijo (Pravil - nik o določitvi … 2004). Medtem, ko je bilo v večini primerov znotraj posamezne drevesne vrednote podano točno število dreves, je bilo včasih v kratki oznaki omenjeno le »drevesa« ali »skupina dreves«. V Registru

je bilo zabeleženih 34 zapisov drevesnih vrednot. V novo bazo smo dodatno vključili 5 zapisov, ki sicer rastejo zunaj meja predvidenega parka, vendar znotraj geografsko zaključene celote občine Jezersko. Med 39 upoštevanimi zapisi iz Registra naravnih vrednot, jih 5 vsebuje več kot eno drevo.

Na Zavodu za varstvo kulurne dediščine Slovenije Območna enota Kranj ne vodijo posebnega seznama drevesne dediščine, vendar pa v okviru svojega dela upoštevajo drevesa, za katera se domneva, da imajo kulturni pomen (vaška drevesa, drevorede in podobno). V Registru nepremične kulturne dediščine (Internet 2) smo našli 5 dreves (4 zapisi) in jesenove meje, vendar pa je bilo nemogoče dobiti kakršnekoli druge podatke.

Zavod za gozdove Slovenije vodi svoje sezname izjemnih dreves. V naši raziskavi smo upoštevali 35 izjemnih dreves, katerih podatke so nam posredovali iz ene območne (Bled) in dveh krajevnih enot (Jezersko in Tržič) (Seznam evidentiranih … 2006, Neuradni seznam … 2006).

Neuradne sezname drevesne dediščine vodijo tudi v občinah Jesenice in Tržič, zaradi pomanjkljivih podatkov (drevesa so le našteta, ne pa tudi ustrezno evidentirana in zanje nihče ne skrbi), smo te baze upoštevali le kot sekundarni vir.

5 Rezultati in razprava

Za predstavitev celostnega pristopa inventarizacije drevesne dediščine, smo za raziskovano in vplivno območje pripravili novo bazo drevesne dediščine, ki vključuje drevesne vrednote, drevesno dediščino iz obstoječih seznamov ter dodatnih 18 dreves in 3 nize dreves, ki smo jih našli in popisali med terenskim delom.

5.1 Tipi drevesne dediščine

Že takoj na začetku izpostavljamo zanimivo ugotovitev, ki zadeva tip drevesne dediščine. Med terenskim delom se je pokazalo, da se v nekaterih primerih posamezni zapis nanaša na več dreves (včasih iste, lahko pa tudi različnih vrst), kar pa ni bilo razvidno iz obstoječih seznamov drevesne dediščine. Obstajajo pa tudi drevesa, ki rastejo sorazmerno blizu, obravnavana pa so kot posamezna drevesa. Pri slednjem je treba upoštevati, da se skupine dreves lahko delijo v različne tipe, ki imajo v pokrajini različne vloge: drevesa, ki rastejo v nizih, se vizualno in tudi pomensko razlikujejo od dreves, ki rastejo v gruči. Poleg tega varovanje posameznega drevesa ni enako varovanju skupine dreves. Za čim bolj sistematično obravnavo smo najprej uvedli različne tipe drevesne dediščine. Skladno s členitvijo gozda, ki je v uporabi v gozdarstvu v Sloveniji in ugotovitvami na terenu smo definirali/opredelili naslednje tipe drevesne dediščine (Slika 3):

- Posamezno rastoča drevesa (Preglednica 1)
  - v gozdu
    - zunaj gozda
      - hišno drevo
      - vaško drevo
      - mestno drevo (navadno raste na vrtu stare gostilne)
- **Skupina dreves** predstavljajo drevesa iste ali različne vrste, ki rastejo v bližini drug drugega in katere prepoznaven pomen ostane, četudi se zamenja (ne pa odstrani!) njen posamezen del. Skupina dreves je po določenih značilnostih v pokrajini prepoznavna kot celota. Šop dreves prepoznamo kot nekaj dreves brez površinskega značaja, toda opazne oblike. Pri nizu dreves pa gre za drevesa iste ali različne vrste, ki rastejo v liniji ali v koridorju in so pogosto spontano nastala z izbirnim načinom gospodarjenja.
  - v gozdu
    - šop dreves
  - izven gozda
    - skupina dreves
    - šop dreves
    - niz dreves

Slika 3: Posamezno drevo, skupina dreves, šop dreves imenovan Čeringlska krona in jesenove meje na Jezerskem.
Glej angleški del prispevka.

5.2 Drevesna dediščina na raziskovanem območju z vidika tipov

Podroben pregled seznamov je pokazal, da so nekatere drevesa vodena na več kot enem seznamu (Slika 2). Na podlagi podatkov iz Registra naravnih vrednot, Registra nepremične kulturne dediščine in ostalih seznamov dreves, smo na raziskovanem območju identificirali/evidentirali 90 zapisov/enot drevesne dediščine (Preglednica 1). Po terenskem ogledu smo ugotovili, da 7 dreves (6 zapisov/enot) iz Registra naravnih vrednot ne raste več in jih izločili iz nadaljnje obravnave. Na raziskovanem območju smo zabeležili 80 posamezno rastočih dreves (76 zapisov/enot) ter 2 skupini, 1 šop in 5 nizov dreves.

Med **posameznimi drevesi** je le 32 dreves (40 %) vključenih v Register naravnih vrednot. Večina posameznih dreves je listavcev (72,5 %), med katerimi prevladujejo lipe (Tilia Platyphyllos and Tilia Cordata). Med iglavci so najpogostejše smreke (Picea abies). Na območju so prisotne še naslednje vrste: jelka (Abies alba), kostanj (Castanea sativa), bukev (Fagus sylvatica), jesen (Fraxinus excelsior), brest (Ulmus sp.), tisa (Taxus baccata), macesen (Larix decidua), hrast (Quercus robur), hruška (Pyrus sp.) in črni bezeg (Sambucus nigra).

Obe skupini lip rasteta v občini Jezersko, kjer so lipe ob domačijah sadili kot hišna drevesa. Včasih so lipe ob hišah sadili tudi zaradi obrambe pred vetrom.

Edini **šop** dreves raste v gozdu, kjer je bil v preteklosti pašnik. Gre za skupino sedmih bukev, imenovanih Čeringlska krona, ki rastejo v vencu. Vsaka bukev v premeru meri 40 cm ali več. Zelo verjetno je, da drevesa v šopu rastejo iz štora (Meglič 2011). Po mnenju lastnika so bukve stare od 150 do 200 let.

Na območju raste tudi 5 **nizov dreves**. 2 od nizov rasteta na obeh straneh poti, po kateri so v preteklosti gnali živino na pašo. Drevesa so imela vlogo ograje in so onemogočala, da bi se čreda razkropila po njivah in delala škodo. Domačini so nam v intervjujih povedali, da tovrstni nizi v zadnjem času naglo izginjajo. Tretji niz so nizi obsekanih jesenov, ki na Jezerskem ustvarjajo tipično kulturno pokrajino, poznano tudi kot »jesenove meje«. Na Jezerskem so namreč lastniki na zemljiških mejah sadili jesene, ki so jih obsekavali za vejnike, s katerimi so pozimi hranili drobnico. Dodatna prednost omenjenih nizov je bila zaščita pred močnim vetrom. Četrti niz pripada ostanku drevoreda, ki je nekoč rasel ob cesti; danes raste le še 5 hrastov, ki pa so v slabem stanju. Zadnji niz je bil zasajen v spomin Josipa Broza Tita ob njegovi smrti (88 lipovcev kolikor je bil star, ko je umrl). Po 28 letih raste še 39 dreves.

Prostorski prikaz drevesne dediščine na raziskovanem območju, predstavljen na tematski karti (Slika 4), podaja še dodatne informacije: različne lastnosti so predstavljene s kartografskimi spremenljivkami (na primer asociativni simboli za različne tipe drevesne dediščine, različne barve za različne vire podatkov in podobno).

Slika 4: Prostorski prikaz (nove) enotne evidence drevesne dediščine, ki vključuje že inventarizirana ter v sklopu terena na novo dodana drevesa.
Glej angleški del prispevka.

6 Sklep

Glavni namen prispevka je bil pokazati na kompleksnost drevesne dediščine, ki je v večini primerov v tesni povezanosti s prisotnostjo človeka ter rabe prostora v določeni pokrajini. Za transparentno in učinkovito varovanje te dediščine je treba vzpostaviti institucionalni (formalno-pravni) okvir, ki bo vključeval drevesa, pomembna tako zaradi materialnih kot tudi nematerialnih lastnosti.

V Sloveniji je trenutno drevesna dediščina evidentirana v različnih seznamih. Razpršenost podatkov predstavlja resno oviro za učinkovito upravljanje in varovanje drevesne dediščine. Na podlagi izkušenj iz raziskovanega območja se je pokazalo, da podvojeni, nepopolni, stari ali celo napačni podatki zmanjšujejo verodostojnost seznamov, po drugi strani pa obstaja velika nevarnost, da se izgubijo drevesa iz neuradnih seznamov. Predstavljene slabosti trenutne inventarizacije drevesne dediščine na raziskovanem območju so posledica neusklajenosti podatkov in institucionalne nepovezanosti.

Pomemben izziv, povezan z evidentiranjem drevesne dediščine, izhaja iz dinamične narave dreves. Ker so drevesa živa bitja, ki tudi umirajo, so tudi evidence podvržene spreminjanju in ne bodo nikoli dokončne.

Za varovanje drevesne dediščine je izjemnega pomena sistematično evidentiranje dreves. Enotna in posodobljena evidenca celotne drevesne dediščine, pri kateri je upoštevana tipizacija in do katere imajo vpogled različne institucije, ki se ukvarjajo z varstvom drevesne dediščine, je nujni pogoj za učinkovito

Preglednica 1: Različni tipi drevesne dediščine in drevesne vrste/rodovi, ki rastejo na območju predvidenega parka Karavanke Natura 2000.

	posamezno drevo (76 enot)	skupina dreves (2 enoti)		šop dreves (1 enota)	niz dreves (5 enot)				
	80 posameznih dreves	Lipe na zapuščeni domačiji v Robcih	Lipe pri Župnišču na Jezerskem	Čeringlska krona	Stagne pri Zabreznici	Šenkove ulice	jesenove meje	hrastov drevored	spominske lipe
lipa	35	5	10						39
smreka	10								
jelka	7								
kostanj	6								
bukev	5			7					
jesen	5					neznano			
brest	3								
tisa	3								
macesen	2								
hrast	1							5	
hruška	1								
črni bezeg	1								
mešano					neznano		neznano		

varovanje in podpora ustreznim odločitvam. Različni tipi drevesne dediščine imajo v pokrajini različno vlogo, različno pa je tudi njihovo varovanje. Predstavljeno evidenco bo treba dopolniti tudi s pristojnostmi in odgovornostmi omenjenih institucij. Dodatna predstavitev dreves na tematski karti znatno prispeva k transparentnemu vrednotenju, upravljanju in varovanju drevesne dediščine, s tem pa tudi pri ozaveščanju javnosti. Šele ozaveščena javnost pa lahko tvorno vstopi v proces trajnostnega razvoja in zagotovi odgovoren in zrel odnos do življenjskega okolja (Fridl in ostali 2009, Urbanc 2011).

7 Literatura

Glej angleški del prispevka.